REMARKS

The Examiner is thanked for the performance of a thorough search.

Prior to this response, Claims 17-33, 39-41, 48, 49 and 56 were pending in the application. By this response, two new claims are added and no claims are cancelled. Hence, Claims 17-33, 39-41, 48, 49 and 56-58 are pending in the application.

By this response, Claims 1, 2, 29, 31, 39, 48 and 49 are amended.

SUMMARY OF THE REJECTIONS/OBJECTIONS

Claims 29 and 31 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite.

Claims 17, 18, 26-31, 39-41, 48, 49 and 56 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Crosskey et al. ("Crosskey"; U.S. Patent No. 6,035,281) in view of Pitts ("Pitts"; U.S. Patent Number 5,611,049); Claims 19-24 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Crosskey in view of Pitts in further view of Allard et al. ("Allard"; U.S. Patent Number 6,018,619); and Claims 25, 32 and 33 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Crosskey in view of Pitts in further view of Allard in further view of Jennings, III et al. ("Jennings"; U.S. Patent Number 6,760,763).

OVERVIEW OF EMBODIMENTS OF THE INVENTION

First, Applicants are not claiming to have invented network content access activity records, *per se*, or caching of content, *per se*. Rather, embodiments of the invention involve specific techniques, and specific configurations of and interactions between specific network devices (including a central gateway server controlled and managed by a cooperative organization of various types of network service providers, which may include network owners and telecommunications carriers), so that content publishers are able to centrally monitor

accesses to their content regardless of where the content is cached around the Internet. By contrast, content publishers previously had to interact directly with each of the numerous cache locations in order to truly know about and understand the totality of accesses to their content that is cached throughout the Internet.

THE REJECTIONS NOT BASED ON THE PRIOR ART

Rejection under 35 U.S.C. §112, Second Paragraph

Claims 29 and 31 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite. Specifically, the Office Action alleges that the term "quality" is vague and indefinite. This rejection is traversed.

Amended Claims 29 and 31 recite "wherein the step of distributing the revenue to members of the cooperative is based on the quality of performance of the member contribution to the network services provided."

In the application, Applicants are not being their own lexicographer with respect to the term "quality." Therefore, Applicants are not attempting to rebut the presumption of the term's ordinary and customary meaning. The term "quality" is a well-known and commonly used term in the English language, having an ordinary and customary meaning. For example, the "Merriam-Webster Online Dictionary" definition of "quality" includes the following:

2 a : degree of excellence : <u>GRADE</u> < the *quality* of competing air service --Current Biography> b : superiority in kind < merchandise of *quality*>.

Granted, as with most terms in the English language, the term "quality" has more than one definition. However, claim terminology is to be interpreted in the context of the claim as a whole. Therefore, use of the term "quality" in Claims 29 and 31 is not vague and indefinite because one skilled in the art, interpreting the term in the context of the claim language as a whole and giving the term its ordinary and customary meaning, can readily resolve the claim

language to the meaning presented above. Additionally, Claims 29 and 31 are amended to recite "the quality of performance of the member contribution...," which provides additional context to the term "quality." Based on the foregoing, withdrawal of the rejection of Claims 29 and 31 under 35 U.S.C. § 112, second paragraph is respectfully requested.

THE REJECTIONS BASED ON THE PRIOR ART

Rejections under 35 U.S.C. §103(a)

(I) Claims 17, 18, 26-31, 39-41, 48, 49 and 56

Claims 17, 18, 26-31, 39-41, 48, 49 and 56 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over *Crosskey* in view of *Pitts*. This rejection is traversed.

Claims 17 recites the following, with emphasis added:

receiving at a gateway that belongs to a set of one or more gateways, activity records that contain statistics about requests for content that resides in caches at a plurality of locations distributed on the network, wherein the caches include content provided by a plurality of content publishers; segregating the statistics based on which content publisher provided the content associated with the statistics; and

providing to each content publisher statistics corresponding to requests for content, provided by that content publisher, that is distributed in various caches on the network.

There are several features regarding the statistics recited in Claim 17 that are particularly noteworthy, and that are not disclosed or suggested in any of the cited references of record, as follows:

¹ Although the ordinary and customary meaning of "quality" in the context of Claims 29 and 31 is believed to be clear and definite, Applicants offer to amend these claims to explicitly recite a definition similar to that presented, if the Examiner takes the position that such an amendment would expedite prosecution of the application by placing these claims in condition for allowance.

- (a) the statistics are about requests for content that resides in caches at a plurality of locations distributed on the network;
- (b) the statistics are segregated based on which content publisher provided the corresponding cached content; and
- (c) each content publisher is provided the actual statistics that correspond to their respective cached content which, again, is distributed in caches around the network.

One distinguishing feature, which is not disclosed or suggested in *Crosskey* or *Pitts*, is that the statistics are about requests for content that is distributed in caches across a network.

Crosskey discusses collecting request information, at a proxy server between clients and content provider servers (i.e., web servers), about accesses directly to the web server or to the proxy server's cache, but not about content that is distributed in multiple caches on a network.

Other distinguishing features, which are not disclosed or suggested in *Crosskey* or *Pitts*, is that the statistics are segregated based on which content publisher provided the corresponding cached content, and that the actual respective statistics are provided to each corresponding content provider. By contrast, *Crosskey* discusses that the request log information is used to calculate billing based on the bandwidth usage by the client of the accessed page, and that it is this calculated billing or payment summary, not the actual access statistics and not detailed statistics about each request for distributed cached content, that is provided to a given content provider. To further distinguish, the request statistics are received, segregated and provided according to the embodiment recited in Claim 17, rather than (a) transforming or converting request statistics into billing/payment information based on a bill/cost-sharing arrangement (col. 6, lines 18-34) and based on actual network bandwidth used by the client, which is a function of the connection time, peak time, off-peak time, transfer message size and duration of transfer, etc. (col. 7, lines 5-15), and (b) providing this billing/payment summary information to content

providers. *Crosskey* clearly states that "the total bill for each customer and for any other party responsible for payment is calculated" (col. 11, lines 32-35). The "total bill" is not the same as statistics about requests for content in caches distributed on a network.

Hence, rigorously comparing the specific features recited in Claim 17 with the collective disclosure of *Crosskey* and *Pitts* shows that it would not have been obvious to one skilled in the art to arrive at the embodiment recited in Claim 17. This is because the collective disclosures of *Crosskey* and *Pitts* simply do not teach or suggest the features recited in Claim 17, as shown above. Further, there is no objective proof provided in the Office Action as to how one skilled in the art could possibly arrive at the embodiment recited in Claim 17, in view of the deficient teachings of the cited references. In other words, the gaps in the collective teachings of the references are too significant for such teachings to substantiate a valid obviousness rejection and, therefore, a *prima facie* case of obviousness is not established.

Based on all the foregoing reasons, withdrawal of the rejection of Claim 17 under 35 U.S.C. § 103(a) is requested.

Claims 39 and 48 recite similar limitations as Claim 17 and, therefore, are patentable over the cited references for at least the same reasons as Claim 17. For example, the proxy server 5 of *Crosskey* does not perform the recited steps as does the apparatus of Claim 39, as shown above.

Claims 18, 26-31, 40, 41, and 49 depend, directly or indirectly, from one of Claims 17, 39 or 48. Therefore, each of Claims 18, 26-31, 40, 41, and 49 is patentable over the cited references for at least the same reasons as the claim from which it depends. Furthermore, each of Claims 18, 26-31, 40, 41, and 49 recites at least one additional feature that makes it separately patentable over the references of record. Due to the fundamental distinctions between the independent claims and the *Crosskey* and *Pitts* references already described.

exhaustive discussion of these additional patentable features recited in the dependent claims is largely foregone at this time, except as follows. However, the rejection of the dependent claims is collectively traversed, and no statements of official notice or allegations of well-known features that may be present in the Office Action are stipulated to or admitted as prior art features, and the right to separately argue such features in the future is not disclaimed.

Claim 26 recites the content access statistics are transmitted to a gateway controlled by a cooperative of associated network service providers. Crosskey discusses a proxy server that performs billing/payment functions for web servers, but does not disclose transmitting of statistics to a gateway controlled by a cooperative of network service providers. That is, there is no mention that the proxy server might be controlled by parties associated with the web servers. As previously mentioned, the specific configurations of network devices, including the central gateway server controlled and managed by a cooperative of various types of network service providers, enables content publishers to monitor accesses to their content regardless of where the content is cached around the Internet. The concept of such a centralized, cooperative management of distributed cached content is not supported in the cited references.

These same deficiencies in the cited references apply also to Claim 40, in that the proxy server 5 of *Crosskey* does not perform the recited steps as does the apparatus of Claim 40, as shown above. Furthermore, in the rejection of Claim 40, the Office Action relies on the web servers 4 of *Crosskey* to allege a corresponding apparatus, which contradicts the rejection of Claim 39, in which the Office Action relies on the proxy server 5 of *Crosskey* to allege a corresponding apparatus. Thus, the rejections of Claims 39 and 40 are inconsistent and incompatible.

Claim 28 recites receiving revenue for network services provided and distributing the revenue to members of the cooperative based on member contribution to the network services provided. By contrast, the cited sections of *Crosskey* discuss identifying parties responsible for payment and parties entitled to credit, and calculating payment and credit for each party. Thus, receiving and distributing revenue for services provided is clearly different than calculating payments and credits. Being associated as a cooperative, the member parties can exchange actual revenue for relative contributions to services provided, where the content publishers are a primary source of revenue for the cooperative (see, e.g., paragraph [0061]). Thus, with the subject matter of the embodiment recited in Claim 28, network service provider cooperative members share revenue from content publishers for distributing the publishers' content in caches around the network, whereas *Crosskey* discusses network service providers sharing, with the clients, the cost of access to content. Clearly, these are different revenue models, directed to different services. The same deficiencies in the cited references apply also to Claim 30.

Claim 56 is, generally, directed to the <u>use of a cooperative organization</u> of parties that provide services related to <u>caching network content at multiple caches distributed over a network</u>, so that <u>a content publisher can monitor access to content that resides in the distributed caches</u> and that is, therefore, <u>not under the direct control of the content publisher</u>. As the foregoing comments illustrate, the collective disclosure of *Crosskey* and *Pitts* shows that it would not have been obvious to one skilled in the art to arrive at the embodiment recited in Claim 56 because the collective disclosures simply do not teach or suggest the features recited therein. For example, neither reference even refers to a content publisher being able to monitor access to distributively cached content that is not under the publisher's direct control, therefore the references clearly do not teach or suggest *how* to enable and provide such functionality to

content publishers. Further, as previously discussed, the gaps in the collective teachings of the references are too significant for such teachings to substantiate a valid obviousness rejection and, therefore, a *prima facie* case of obviousness is not established. Based on all the foregoing reasons, withdrawal of the rejection of Claim 56 under 35 U.S.C. § 103(a) is requested.

(II) Claims 19-24

Claims 19-24 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Crosskey in view of Pitts in further view of Allard. This rejection is traversed.

Claims 19-24 depend from Claim 17 and, therefore, each of these claims is patentable over the cited references for at least the same reasons as discussed above in reference to Claim 17. Therefore, withdrawal of the rejection of Claims 19-24 is requested.

Furthermore, each of Claims 19-24 recites at least one additional feature that makes it separately patentable over the references of record. Due to the fundamental distinctions between the independent claims and the *Crosskey*, *Pitts* and *Allard* references already described, exhaustive discussion of these additional patentable features recited in the dependent claims is largely foregone at this time, except as follows. However, the rejection of the dependent claims is collectively traversed, and no statements of official notice or allegations of well-known features that may be present in the Office Action are stipulated to or admitted as prior art features, and the right to separately argue such features in the future is not disclaimed.

Claim 20 recites a specific configuration in which activity records are received (a) by the cooperative gateway (b) from one or more distribution network servers that received activity records (c) from one or more access provider gateways that received activity records (d) from one or more edge servers (*see*, e.g., FIG. 2 and FIG. 4). It is unclear from the Office Action

which components from the references allegedly teach the components recited in Claim 20, and further clarification is kindly requested. For example, *Crosskey* discusses content provider server 4 and proxy server 5; *Pitts* discusses Network Distributed Cache computers; and *Allard* discusses an information server and a proxy server. However, it is unclear from these disparate references to unrelated components what position the Office Action is taking in the rejection of Claim 20, as well as how these disparate references would possibly lead one skilled in the art to find the subject matter of Claim 20 obvious, i.e., how to find obvious the specific configuration of and interaction between the various network components recited in Claim 20. To reiterate, if the rejection of this claim is maintained in the next Action, clarification is requested regarding which components mentioned in *Crosskey*, *Pitts* and *Allard* allegedly teach corresponding components and corresponding functionality as recited in Claim 20.

Additionally, regarding Claim 23, the absence of teachings in the cited references for enabling the capability for a content publisher to monitor access to distributively cached content that is not under the publisher's direct control relates back to the comments provided above in reference to Claim 17.

(III) Claims 25, 32 and 33

Claims 25, 32 and 33 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over *Crosskey* in view of *Pitts* in further view of *Allard* in further view of *Jennings*. This rejection is traversed.

Claims 25, 32 and 33 depend from Claim 17 and, therefore, each of these claims is patentable over the cited references for at least the same reasons as discussed above in reference to Claim 17. Therefore, withdrawal of the rejection of Claims 25, 32 and 33 is requested.

Furthermore, each of Claims 25, 32 and 33 recites at least one additional feature that makes it separately patentable over the references of record. Due to the fundamental distinctions between the independent claims and the *Crosskey*, *Pitts*, *Allard* and *Jennings* references already described, exhaustive discussion of these additional patentable features recited in the dependent claims is largely foregone at this time, except as follows. However, the rejection of the dependent claims is collectively traversed, and no statements of official notice or allegations of well-known features that may be present in the Office Action are stipulated to or admitted as prior art features, and the right to separately argue such features in the future is not disclaimed.

Claim 33 recites that transmitting the activity log to the content publisher is <u>in response</u> to a request from the content publisher. Crosskey discusses an agent program that can be used to log information from main memory of the proxy server 5, but in no way teaches or suggests that the agent program is an agent of a content publisher. Hence, the agent program of Crosskey clearly does not substantiate the rejection of the step of transmitting the activity log in response to a content publisher request, and such a gap in the collective teachings of the references is too significant for such teachings to substantiate a valid obviousness rejection and, therefore, a prima facie case of obviousness is not established.

NEW CLAIMS

New Claims 57 and 58 are added to claim previously unclaimed subject matter disclosed in the application as filed (see, e.g., paragraph [0057]). Therefore, no new matter is introduced in the application by way of these new claims.

Claims 57 and 58 depend from Claim 17 and, therefore, each of these claims is patentable over the cited references for at least the same reasons as discussed above in reference to Claim 17. Furthermore, each of Claims 57 and 58 recites an additional feature that, in and of itself, is patentable over the cited references of record.

CONCLUSION

For the reasons set forth above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a formal Notice of Allowance is believed next in order, and that action is most earnestly solicited.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

Please charge any shortages or credit any overages to Deposit Account No. 50-1302.

Respectfully submitted,

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by Daroi Sakama